

# Cztery słody piwa

- Gravity **21.3 BLG**
- ABV **9.5 %**
- IBU **22**
- SRM **22.1**
- Style **Belgian Dark Strong Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **100 min**
- Evaporation rate **10 %/h**
- Boil size **28 liter(s)**

## Mash information

- Mash efficiency **68 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **27.8 liter(s)**
- Total mash volume **37 liter(s)**

## Steps

- Temp **54 C**, Time **0 min**
- Temp **66 C**, Time **25 min**
- Temp **72 C**, Time **40 min**

## Mash step by step

- Heat up **27.8 liter(s)** of strike water to **59.7C**
- Add grains
- Keep mash **0 min** at **54C**
- Keep mash **25 min** at **66C**
- Keep mash **40 min** at **72C**
- Sparge using **9.5 liter(s)** of **76C** water or to achieve **28 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount         | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Pilzneński             | 4 kg (41%)     | 81 %  | 4   |
| Grain | Monachijski            | 2 kg (20.5%)   | 80 %  | 16  |
| Grain | Briess - Pale Ale Malt | 2 kg (20.5%)   | 80 %  | 7   |
| Grain | Biscuit Malt           | 0.3 kg (3.1%)  | 79 %  | 45  |
| Grain | Caraaroma              | 0.3 kg (3.1%)  | 78 %  | 400 |
| Grain | cookie                 | 0.6 kg (6.2%)  | 79 %  | 70  |
| Sugar | cukier kandyzowany     | 0.5 kg (5.1%)  | 80 %  | 200 |
| Grain | Czekoladowy            | 0.05 kg (0.5%) | 60 %  | 788 |

## Hops

| Use for | Name                  | Amount | Time   | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil    | Marynka               | 20 g   | 60 min | 10 %       |
| Boil    | Tettnang              | 20 g   | 60 min | 4 %        |
| Boil    | Saaz (Czech Republic) | 10 g   | 5 min  | 4.5 %      |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                           |     |        |        |                  |
|---------------------------|-----|--------|--------|------------------|
| FM25 Klasztorna medytacja | Ale | Liquid | 200 ml | Fermentum Mobile |
|---------------------------|-----|--------|--------|------------------|